

18

Photochemically Induced Circular Dichroism of Semiconductor Nanocrystals*

© F.M. Safin, V.G. Maslov, A.Y. Dubavik, E.P. Kolesova, A.V. Baranov, and A.V. Fedorov

ITMO University,
197101 St. Petersburg, Russia
e-mail: farruhsafin@gmail.com

Received January 18, 2020

Revised January 18, 2020

Accepted April 20, 2020

Here, we report an investigation of optical activity which was photochemically induced by illumination of QRs and DiRs with circularly polarized light; the photo-induced circular dichroism was quantitatively estimated, and it was shown that the photo-induced chemical reaction proceeds selectively, depending on the handedness of circularly polarized light.

Keywords: chirality, optical activity, circular dichroism, photoinduced circular dichroism, semiconductor nanocrystals, quantum rods, quantum dot-in-rods.

* The 2nd international school-conference for young researchers „Smart Nanosystems for Life“, St.Petersburg, Russia, December 10–13, 2019.

Полный текст статьи опубликован в „Optics and Spectroscopy“ 2020 V. 128. N 8.